

Case Study 142: Flood Pontoon

SPECIFICATIONS

| | |
|---------------------|---|
| Waterjet: | DJ110Z-B (booster) x1 |
| Engine: | Volvo Penta TAD720VE 174kW @ 2300rpm |
| Gearbox: | N/A |
| Vessel: | 5.15m L.O.A 1.8m Beam |
| Performance: | 30m³/min @ 2200rpm |



Flood Relief Pontoon

As part of government's flood relief program in Thailand, the Royal Thai Army has commissioned and successfully deployed forty waterjet pontoons. Anchored standstill in a row on rivers or channels, the pontoons utilize the waterjet in its capacity as a very high volume pump to increase the flow of flood water downstream from affected areas.

Utilising waterjets in this application has a lot of merits; and enables the pontoon to operate efficiently by decreasing waterlevels very quickly. Furthermore, waterjets are certainly the best solution for economically achieving very high flow rates of water.

Power is provided by Volvo Penta industrial diesel engine, which is directly coupled to the DOEN DJ110Z-B waterjets. The DOEN 11-inch (280mm) diameter axial flow impellers provide excellent efficiency and high volume flow at reduced fuel consumption and exceptional cavitation margin at zero speed.

As there is no requirement for steering or reverse, the waterjet operates in a booster configuration (DJ110Z-B) with no reverse bucket and steering bowl, reducing the cost and the weight of the waterjet.

The transom mounted DOEN waterjet, means simple, quick and cost-effective installation, as well as minimum inboard space requirement. An alloy hull insert is used to form the initial part of the intake tunnel and provide a rigid and flat mounting face for the waterjet

This has been certainly a unique and different application to the usual waterjet propulsion systems.

Doen WaterJets provides yet another showcase of company's capacity in offering tailored engineering solutions. Doen WaterJets welcomes the opportunity to work with other customers who have a requirement to move large amounts of water in flood prone areas.